

Notice of Allowability

Application No.

10/087,001

Applicant(s)

RATNER ET AL.

Examiner

Art Unit

Damon Conover

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to 12 July 2006.

2. The allowed claim(s) is/are 1,5-9 and 12-20.

3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some* c) None of the:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) hereto or 2) to Paper No./Mail Date _____.

(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)

5. Notice of Informal Patent Application (PTO-152)

2. Notice of Draftsperson's Patent Drawing Review (PTO-948)

6. Interview Summary (PTO-413),
Paper No./Mail Date 20060801.

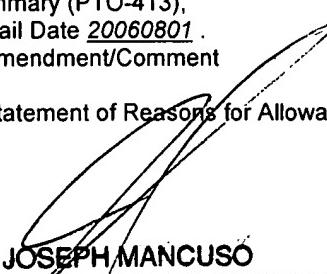
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____.

7. Examiner's Amendment/Comment

4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material

8. Examiner's Statement of Reasons for Allowance

9. Other _____.


JOSEPH MANCUSO
SUPERVISORY/PATENT EXAMINER

DETAILED ACTION

Response to Amendment

1. The amendment filed 12 July 2006 has been entered and made of record.

Examiner's Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

For claim 20, on line 4, please replace "at least one global characteristic" with "a global measure of color variation".

Authorization for this examiner's amendment was given in a telephone interview with James Okamoto on 2 August 2006.

Response to Arguments

3. Applicant's arguments, see page 5, filed 12 July 2006, with respect to claims 1, 9, 16-18, and 20 have been fully considered and are persuasive. The amended independent claims 1, 9, and 20 overcome the double patenting rejection; therefore the rejection of claims 1, 9, 16-18, and 20 has been withdrawn.

4. Applicant's arguments, regarding the limitation of the dynamic chain-based threshold function which is dependent on a global measure of color variation, see page 9, filed 12 July 2006, with respect to claims 1, 5-8, 9, 12-18, and 19 have been fully

considered and are persuasive. The rejection of claims 1, 5-8, 9, 12-18, and 19 under 35 U.S.C. §103 has been withdrawn.

5. Due to the Examiner's Amendment, the applicant's arguments, regarding the limitation of the dynamic chain-based threshold function which is dependent on a global measure of color variation, see page 9, filed 12 July 2006, with respect to claims 1, 5-8, 9, 12-18, and 19, also apply to claim 20; therefore the rejection of claim 20 under 35 U.S.C. §103 has been withdrawn.

Reasons for Allowance

6. Claims 1, 5-9, and 12-20 are allowed. The following is an examiner's statement of reasons for allowance:

Independent claims 1, 9, and 19-20 recite the limitation of: determining a dynamic chain-based threshold function that is dependent on a global characteristic, comprising a global measure of color variation, of the image being processed; and applying the dynamic chain-based threshold function to selectively filter the candidate edge chains.

The closest reference of Murayama (U.S. Patent 5,978,513) discloses a video signal decoding apparatus and method which reduces the amount of generating code by detecting feature points of motion picture and chain coding the data of the feature points (column 1, lines 14-17). Murayama describes that the invention detects feature points of an input video signal and identifies chain codes (edge chains) by chain coding the feature amount and coordinates of the feature points (column 5, lines 8-10). The predetermined index value (length of the chain and/or the edge intensity of the chain) is

obtained for each chain (column 5, lines 37-39) and is compared to the predetermined threshold value T or S (column 5, lines 42-43). Chain codes with index values at or below the threshold values T or S are eliminated (column 5, lines 42-46).

The prior art does not anticipate, nor does it suggest the following limitation in combination with the other claimed limitations: determining a dynamic chain-based threshold function that is dependent on a global characteristic, comprising a global measure of color variation, of the image being processed.

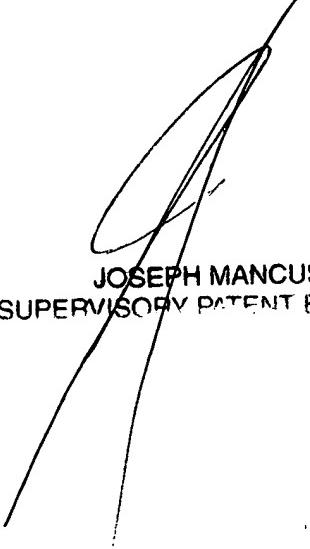
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Damon Conover whose telephone number is (571) 272-5448. The examiner can normally be reached Monday – Friday, 8:00 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso, can be reached at (571) 272-7695. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JOSEPH MANCUSO
SUPERVISORY PATENT EXAMINER